

**REMARKS****1. The Amendments, the Support Therefor, and Basis for Entry**

Claims 1, 2, and 19-30 have been canceled without prejudice to their resubmission in one or more continuing applications, no new claims have been added, and no claims have been amended to leave claims 34 and 36-47 in the application. Since the sole independent claim 34 has been allowed, and the §112 rejections to the dependent claims 36, 37, 39-41 and 43-47 should be withdrawn for the reasons discussed below, it is submitted that all claims are currently in condition for allowance.

**2. Page 6 of the Office Action: Rejection of Claims 36-37 and 43-47 under 35 USC §112(1)**

These rejections should be withdrawn because they fail to set forth a proper *prima facie* basis for the rejections in accordance with MPEP 2163.04, which reads as follows (emphasis added in bold):

**2163.04 Burden on the Examiner with Regard to the Written Description Requirement**

The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *Wertheim*, 541 F.2d at 263, 191 USPQ at 97.

**I. STATEMENT OF REJECTION REQUIREMENTS**

In rejecting a claim, the examiner must set forth express findings of fact which support the lack of written description conclusion (see MPEP § 2163 for examination guidelines pertaining to the written description requirement). These findings should:

(A) Identify the claim limitation at issue; and

**(B) Establish a prima facie case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed.**

In these rejections, there is no statement of "reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed", and thus the rejections are unsupported and must be withdrawn. Following is further explanation why the claims fully meet the requirements of §112(1).

**a. Claims 36-37**

Claim 36 recites "at least one electrically conducting layer situated thereon," and claim 37 recites "at least two or more stacked electrically conducting layers situated thereon." The Examiner alleges that these recitations encompass three electrically conducting layers where the specification discloses only two. However, the rejections provide no statement "why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed," as required by MPEP 2163.04. Further, referring to the priority application (represented by PCT Publication WO 00/33625), the original claims included claims such as claim 14, which recited "a substrate having at least one electrically conducting layer." This claim plainly also supports three (or more) layers, and thereby provides support for claims 36 and 37. Also consider (for example) that page 5 line 20 onward describes the use of electroplating to deposit a subsequent conductive layer over a prior conductive layer (with the prior layer serving as an electrode for the subsequent layer). Thus, it is evident that subsequent layers could be electroplated over any prior layers, since each added layer is conductive. Page 6 line 10 onward suggests that no layers beyond the second may be necessary or desirable (since otherwise the layers grow too thick), but the recited matter is nonetheless plainly supported by original claim 14 and suggested by the specification.

**b. Claims 43-47**

The rejection of claim 43 (and its dependent claims 44-47) should be withdrawn for much the same reasons as claims 36-37. Note that page 5 lines 6-9 state that "the thickness of the seeding layer in the present invention is *preferably* from 3 to 5 micrometers" (emphasis added), and this preferred range was reflected in original claim 25. However, other passages of the specification simply note that the ink/seeding layer is deposited, and no thickness for the layer is specified: the ink must merely be sufficiently applied that it will serve as an effective seeding layer (see, e.g., page 2 line 29-page 3 line 2; original claim 1).

It is inappropriate to require limitation of claim 43 to a range which is clearly and specifically described as merely being a preferred one, when the specification otherwise does not limit the range. Again, the rejection provides no statement "why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed," as required by MPEP 2163.04.

**3. Page 7 of the Office Action: Rejection of Claims 39-41 and 44-47 under 35 USC §112(2)**

It is submitted that claims 39-41 and 44-47 meet the requirements of §112(2) since an ordinary artisan would comprehend the bounds of the claims when read in light of the specification. As noted by the Court of Appeals for the Federal Circuit in *Miles Laboratories Inc. v. Shandon Inc.*, 27 USPQ2d 1123, 1126 (Fed. Cir. 1993):

The "distinctly claiming" requirement [of 35 USC §112(2)] means that the claims must have a clear and definite meaning when construed in the light of the complete patent document. ... Section 112 thus ensures definiteness of claim language. ... The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification. ... If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, Section 112 demands no more.

(Citations omitted.) Here, it is believed that the meaning of claims 39-41 and 44-47 is clear and definite, both when read in a vacuum and even more so when read in light of the specification.

Please note MPEP 2173 *et seq.*, particularly MPEP 2173.02 ("Clarity and Precision"). For example, consider claim 39 in conjunction with its parent claims:

- 34. A lithographic ink for use in a lithographic printing process onto a polymer substrate, the ink comprising a metal or carbon particulate material suspended in a mixture of a resin, an antioxidant, and an organic solvent, wherein the resin comprises a polyamide.
- 38. The lithographic ink of claim 34 wherein the ink is printed on a substrate with a first electrically conducting layer deposited thereon by electroless deposition.
- 39. The lithographic ink of claim 38 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.

There is nothing unclear here, such that an ordinary artisan would not understand the bounds of what is being claimed (i.e., would not be able to tell what infringes): an ink having the composition of claim 34, printed on a substrate with a first electrically conducting layer deposited thereon as in claim 38, and with an electrical component being attached thereto as per claim 39, would infringe claim 39. Claim 39 is in no way vague: it is evident what falls within the claim, and what does not. The same is true of the remaining dependent claims 40-41 and 44-47.

As for claim 46, note that "comprising" means the same thing as "including" (see MPEP 2111.03), and thus there is nothing unclear or confusing about claim 46's reciting the inclusion of a second electrically conducting layer electroplated atop the first electrically conducting layer (recited in claim 53), with the first electrically conducting layer being situated atop the ink having the composition recited in claim 34.

It is noted that the stated bases for the rejections of claims 39-41 and 44-47 are that it is unclear how the dependent claims "further limit" the parent claim, and that the claims set forth "a process/intended use limitation (and not the ink's composition)." Thus, it appears that the rejections of the dependent claims 39-41 and 44-47 may in reality be predicated on their propriety under §112(4) and 37 CFR §1.75(c) (see MPEP 608.01(n)), rather than their clarity under §112(2). In this respect, please note the following sections of MPEP 608.01(n) (emphasis added in bold):

### III. INFRINGEMENT TEST

The test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends ( 35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim.

A dependent claim does not lack compliance with 35 U.S.C. 112, fourth paragraph, simply because there is a question as to (1) the significance of the further limitation added by the dependent claim, or (2) whether the further limitation in fact changes the scope of the dependent claim from that of the claim from which it depends. The test for a proper dependent claim under the fourth paragraph of 35 U.S.C. 112 is whether the dependent claim includes every limitation of the claim from which it depends. The test is not one of whether the claims differ in scope. ....

The fact that the independent and dependent claims are in different statutory classes does not, in itself, render the latter improper. Thus, if claim 1 recites a specific product, a claim for the method of making the product of claim 1 in a particular manner would be a proper dependent claim since it could not be infringed without infringing claim 1. Similarly, if claim 1 recites a method of making a product, a claim for a product made by the method of claim 1 could be a proper dependent claim. ....

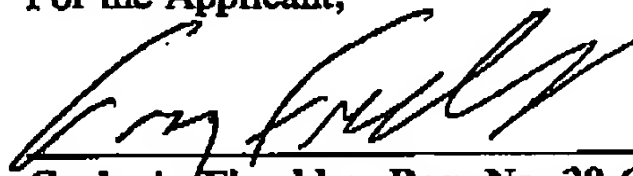
Claims 39-41 and 44-47 are clearly proper dependent claims because one could not infringe any one of claims 39, 40 and 41 without also infringing claim 38. Similarly, one could not infringe any one of claims 44, 45, 46, and 47 without also infringing claim 43. Thus, claims 39-41 and 44-47 do further limit the parent claim and are proper dependent claims in accordance with §112(4).

Since claims 39-41 and 44-47 are clear and definite in accordance with §112(2), and they meet the requirements of §112(4) set forth in MPEP 608.01(n), these rejections should be withdrawn.

**4. In Closing**

If any questions regarding the application arise, please contact the undersigned attorney. Telephone calls related to this application are welcomed and encouraged. The Commissioner is authorized to charge any fees or credit any overpayments relating to this application to deposit account number 18-2055.

For the Applicant,



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